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U.S. Department of the Interior
Bureau of Land Management

Environmental Assessment (EA)

Cabin Canyon Road Maintenance
DOI-BLM-NV-SO10–2012–0098–EA

PREPARING OFFICE

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Prepared by
U.S. Department of the Interior
Bureau of Land Management
Las Vegas Field Office
Las Vegas, Nevada

Table of Contents

List of Tables

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Chapter 1. Introduction

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1.1. Identifying Information:

1.1.1. Title, EA number, and type of project:

Cabin Canyon Road Maintenance, DOI-BLM-NV-S010–2012–0098–EA

1.1.2. Location of Proposed Action:

Mount Diablo Meridian Township 15 S Range 71 E section 04

1.1.3. Name and Location of Preparing Office:

Lead Office - Las Vegas Field Office and number S010

4701 N. Torrey Pines Dr.

Las Vegas, Nevada 890130

1.1.4. Applicant Name:

Bureau of Land Management (BLM)

1.2. Purpose and Need for Action:

Purpose: The purpose of this project is to restore reasonable and safe Off-Highway Vehicle (OHV) access into the Cabin Canyon area of the Gold Butte Area of Critical Environmental Concern (ACEC) Part C, otherwise known as Virgin Mountains ACEC. Historically the northern route into Cabin Canyon was primarily used and maintained by mining interests and created a unique recreational experience for non commercial users such as All Terrain Vehicles (ATV/UTV). Since the cessation of mining operations through the canyon maintenance to roads has been minimal or non existent. The combination of severe precipitation events and no maintenance have left route conditions through the narrowest portion of the canyon in disrepair stopping all but the most skilled OHV users from enjoying some of the most spectacular vistas southern Nevada has to offer.

Need: The need is to comply with the Federal Land Policy Management Act (FLPMA), 43 U.S.C. 1701 et seq., which establishes outdoor recreation as one of the principal uses of public lands, and directs the Secretary of the Interior to regulate, through permits or other instruments, the use of public lands...(43 CFR 2931.3). This project would enhance the public's ability to access public lands for additional recreational opportunities through the use of existing designated routes.

1.3. Scoping, Public Involvement and Issues:

Public scoping was conducted during the evaluation and designation of this road in 2008 as part of the of EA# NV-052-2006-433.

Additional scoping efforts involved internal scoping by BLM resource specialists. Internal scoping is used to ensure that all affected resources are being analyzed and potential impacts addressed. Comments for internal scoping were made between August 2012 and October 2012.

Chapter 2. Proposed Action and Alternatives

2.1. Description of the Proposed Action:

The BLM, Las Vegas Field Office (LVFO), is proposing to improve road conditions in the Cabin Canyon area, which sits within the Gold Butte ACEC Part C. The proposed action is to remove large boulders, filling in small washouts and clearing large debris from the road way using heavy construction equipment. This segment of road is designated “Open” as described in the EA NV-052-2006-433, approved in 2008, and has sustained extensive damage in subsequent rainstorms events (See Figure 1). These improvements will allow for safer passage through the canyon and will improve the motoring public's recreational experience by making an otherwise treacherous OHV loop that allows vehicles to travel on the Cabin Canyon Spur trail to the Nickel Creek trail accessible and passable by reducing road hazards (See Figure 2). Additionally, the proposed work will increase access for fire and other emergency vehicles and personnel.

Cabin Canyon is a narrow canyon south of Mesquite, NV in the Virgin Mountains. The canyon contains a variety of plant and animal life that rely on the ephemeral stream that meanders through it. The stream is fed by springs, rain and snow melt throughout the year but varies in stream flow according to precipitation events and generally runs low in the Summer and Fall months. Some years there is no stream flow.

This project proposes to use heavy construction equipment to restore reasonable recreational OHV and emergency access into the Cabin Canyon area. The intent is to move boulders and debris from the road way and to fill in portions of the road that have been washed out. Boulders and large debris will be moved with either a skip loader, front end loader or excavator. Rock and soils material will be placed so as to not damage any vegetation or wildlife or alter the existing stream flow. In the case of washed out portions of the road, local, existing, non-vegetated soils will be used along with rock material as filler. In most cases, material removed from one portion of the road will be used to fill in another portion of the road. No maintenance is proposed at stream crossings or where stream flow might be significantly affected. The road will not be widened or improved beyond the standards of a primitive trail and will not be maintained for use by full size vehicles although full size vehicles will not be explicitly prohibited. Additionally, no blading or flat blading techniques will be applied.

The proposed project will be conducted outside of fire restriction seasons, if possible. If the project cannot be conducted outside of the fire restriction dates a consultation with a fire line officer will be conducted to ensure all best management practices are being followed. All equipment will be cleaned with water prior to arriving to the project area and cleaned at the nearest cleaning facility after the project ends. The post- project cleaning will be done within 15 miles of the project area (i.e. Mesquite or Bunkerville , Nevada).

Figure 1

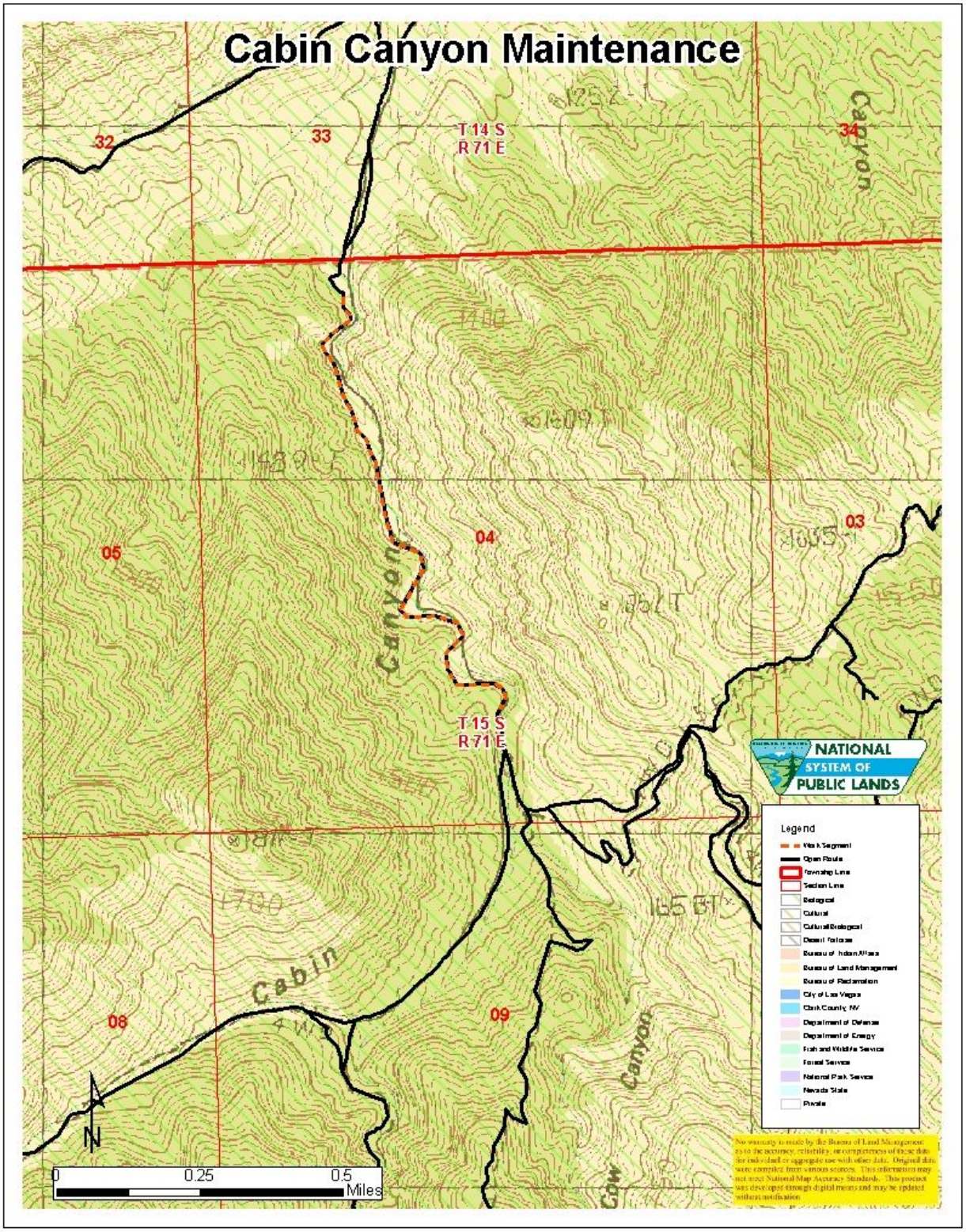
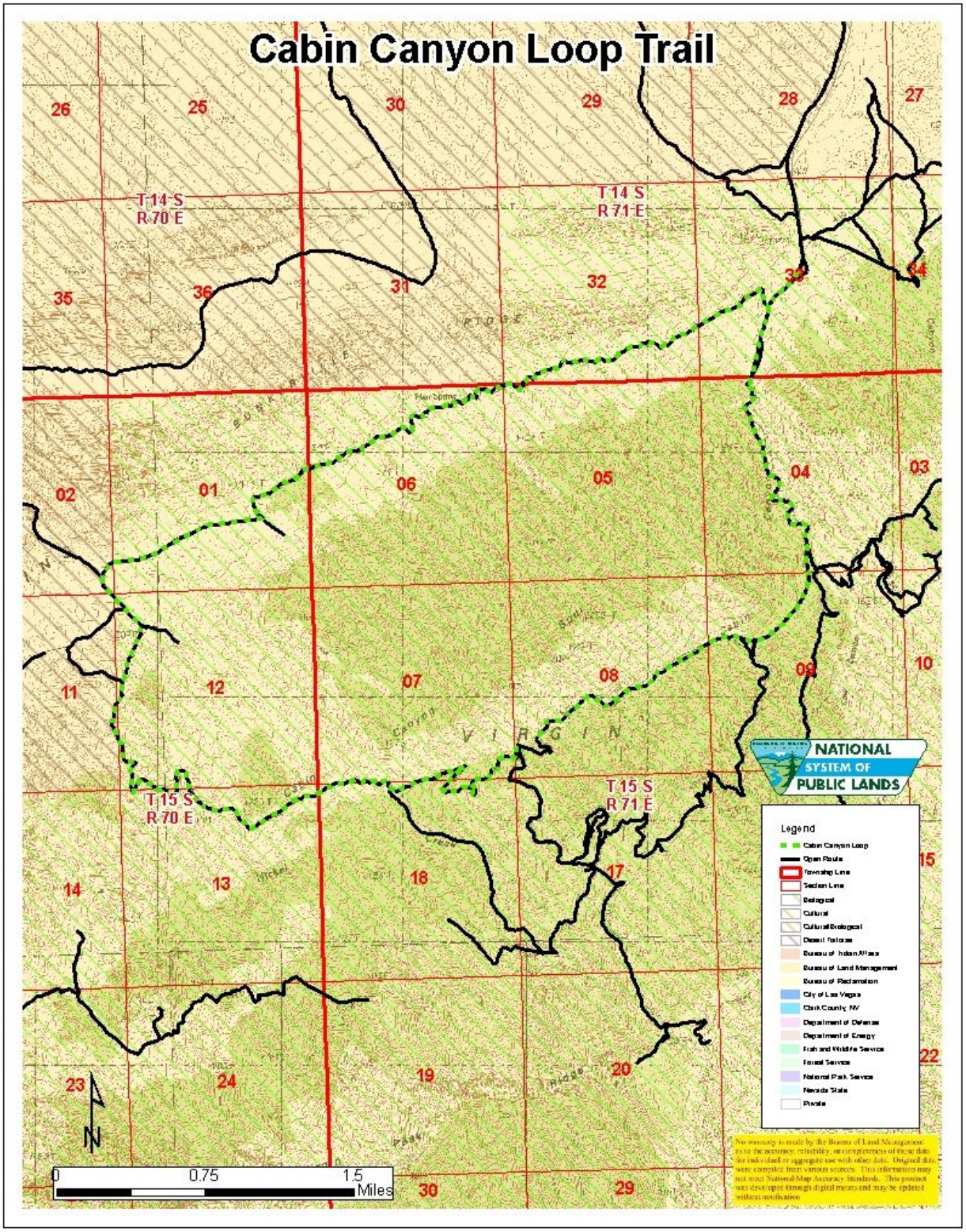

Cabin Canyon Maintenance
T 14 S
R 71 E
T 15 S
R 71 E
32
33
34
04
05
03
08
09
Cabin Canyon
Cow Canyon
NATIONAL SYSTEM OF PUBLIC LANDS
Legend
0
0.25
0.5
Miles
N

Figure 2


Cabin Canyon Loop Trail
T 14 S
R 70 E
T 14 S
R 71 E
T 15 S
R 70 E
T 15 S
R 71 E
NATIONAL
SYSTEM OF
PUBLIC LANDS
Legend
Cabin Canyon Loop
Open Route
Township Line
Section Line
Biological
Cultural
Cultural/Biological
Desert Tortoise
Bureau of Indian Affairs
Bureau of Land Management
Bureau of Reclamation
City of Las Vegas
Clark County NV
Department of Defense
Department of Energy
Fish and Wildlife Service
Forest Service
National Park Service
Nevada State
Private
0 0.75 1.5 Miles
N

2.2. Description of Alternatives Analyzed in Detail:

No Action Alternative: Under the no action alternative no improvements would be made to the road. The condition of the road and access into Cabin Canyon would not improve and would remain a public safety hazard. OHV access through the canyon would be limited for emergency vehicles, field personnel and right of way holders. Additionally, the potential for road widening or braiding would persist. Deterioration of water quality would continue by vehicles attempting to avoid road hazards consequently creating new and unnecessary stream crossings.

2.3. Alternatives Considered but not Analyzed in Detail

No other alternatives were considered.

2.4. Conformance

The EA is in conformance with the NV - Las Vegas Resource Management Plan (RMP).

Recreation Management

Objective

RC-1. Ensure that a wide range of recreation opportunities are available for recreation users in concert with protecting the natural resources on public lands that attract users.

Off-Highway/ Road Vehicle Designations

Objective

RC-11.. Provide opportunities for off-road vehicle use while protecting wildlife habitat, cultural resources, hydrological and soil resources, non-motorized recreation opportunities, natural/aesthetic values, and other uses of the public land.

Chapter 3. Affected Environment:

The Affected Environment section describes the existing conditions of the environmental resources within the project area. Those resources susceptible to impacts are discussed in further detail. There are several resources that are not present in the project area or are present but not affected by the proposed action. These resources will not be discussed further. Resources that may be affected are discussed further in this section and the Environmental Effects section.

Table 1. Supplemental Authorities Table

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rationale
Air Quality		X		The activity will primarily be accomplished through the use of hand tools for the purpose of safety. If it is necessary to use a heavier piece of equipment, such as one powered by a motor or generator, a water truck will be brought on site, if possible, to mitigate for fugitive dust during restoration/maintenance activities. Where possible, water will be applied to the local area prior to soil disturbing activities, if water cannot be brought to the site, every effort will be made to minimize dust generation.
Area of Critical Environmental Concern (ACEC)		X		The proposed action will not result in any new disturbance therefore no impacts to the ACEC are anticipated.
Cultural/Historical	X			Repairing the road is exempt from Section 106 review as per Appendix C.2 of the 2009 State Protocol Agreement with the Nevada State Historic Preservation Office (SHPO)
Paleontological Resources	X			No fossil-bearing geological strata will be adversely affected by the undertaking as proposed.
Environmental Justice	X			No minority or low-income communities are present in project area.
Farmlands Prime or Unique	X			There are no prime or unique farmland designations in the District.
Noxious Weeds/Invasive Non-native Species		X		The proposed action may have an impact on the introduction and spread of noxious and/or invasive weeds by increased vehicular activity. By following the mitigation measures described herein the risks of impacts are reduced to a minimal level.
Native American Religious Concerns	X			No new surface disturbance is proposed in association with this undertaking. Any visual or audible impacts to properties of religious or traditional significance will be short-term and temporary.
Floodplains			X	See comments below and associated Affected Resource Form.
Riparian/ Wetlands			X	See comments below and associated Affected Resource Form.
Threatened, Endangered or Candidate Plant Species	X			Not present.
Threatened, Endangered or Candidate Animal Species.		X		The above proposed action has a no affect determination on the threatened desert tortoise (*Gopherus agassizii*). This project will have no affect on any other federally listed species or designated critical habitat.
Migratory Birds		X		As there will be no new surface disturbance associated with the proposed action, there will be no impact on migratory birds.
Waste - Hazardous/Solid	X			No hazardous or solid material issues are present. .
Water Quality			X	See comments below and associated Affected Resource Form.

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rationale
Wild & Scenic Rivers	**X**			Not present.
Wilderness (Study Area)	**X**			The proposed action is not located within or adjacent to designated Wilderness, WSAs, or ISAs.
Human Health and Safety			**X**	The proposed action will alleviate the current health and safety concerns present due to the existing deteriorated condition of the road, but not cause any forth safety issues.
Soils			**X**	See comments below and associated Affected Resource Form.

Soils:

Water erodibility of the soil in the canyon has not been classified, but soils are described as well-drained in general[1] . Processes of erosion and aggradation are apparent within the stream channel. Flood events usually occur during or shortly following summer monsoonal precipitation, and carry destructive bedloads (boulders and gravels) during rain events. Specific to the Mojave Desert region, these would include the random summer cloud bursts that occur infrequently but can supply a large amount of water to a localized area, or a larger storm such as a tropical storm that occurs on a 100-year time scale. Any of these storms could result in flooding hazards that would cause significant damage across the Proposed Project area and could potentially cause significant localized destruction. Such an event can and has changed the flow channel.

Water Quality/Floodplains/Riparian/Wetlands

Cabin Canyon contains one of the few streams in the Virgin Mountains that tends to be perennial during wet periods and ephemeral during drought periods. Water is usually on the surface from its source at Cabin Spring until the mouth of the canyon at White Rock picnic area. The project location is situated at approximately 4,500 feet in elevation in riparian habitat predominately consisting of canyon grape (*Vitis arizonica*), scrub oak (*Quercus turbinella*), gambel oak (*Quercus gambelii*) and cliffrose (*Purshia mexicana*) along with a variety of grasses, mosses and ferns. Riparian areas tends to be concentrated in parts of the canyon where the slope levels off and water pools.

Recreation

Motorized vehicle travel in the canyon is limited and potentially hazardous due to deteriorated road conditions. Flooding in the canyon is common and has left portions of the road in disrepair. In recent years, road conditions have limited travel through the canyon to OHV, specifically ATV/UTVs.

[1] United States Department of Agriculture, National Resource Conservation Service *Soil Survey of Clark County, Nevada* By Leon J. Lato (Washington DC.: Government Printing Office, 2006)

Chapter 4. Environmental Effects:

Preferred Alternative

Soils/Floodplains/Riparian/Wetlands

The proposed action will increase the velocity of flows thereby increasing soil erosion within the canyon. Increases in soil erosion will result in increased incision within the canyon and increased deposition of eroded materials further downstream. The disturbance associated with repairing the road may increase erosion on and off-site, thereby increasing sediment loads in surface runoff, altering the discharge and retention rates of water and change the velocity of water moving through the system. Increase OHV use on a restored/improved road may lead to an increase in use and exposure to accidental petrochemical spills from motorized recreational equipment. This could result in the degradation of surface water quality. Decreased water quality may also negatively impact the fauna and flora depending on the waters within Cabin Canyon.

Water Quality

The proposed action will increase the run-off and velocity of flows within the canyon which, in turn, will result in infiltration further downstream rather than in the canyon.

Recreation

The proposed project will improve access for all user types and groups in and around the canyon.

Human Health and Safety

The proposed repairs to the road will reduce hazardous driving conditions by removing large boulders and debris from the road and repairing washed out segments making the route safer to travel on and increasing access for emergency vehicles and personnel in the event of an emergency.

Cumulative Impacts

Soils/Floodplains/Riparian/Wetlands

Over time, improvements in roads conditions may increase recreational OHV use through the canyon. Increased use in the canyon, especially at water crossings, may result in an increase danger of petrochemicals spills from motorized recreational equipment. This could result in the long term degradation of soil and water quality and ultimately negatively affecting flora and fauna.

Water Quality

The proposed project; other road maintenance or improvement projects in the area; illegal grazing activities and associated disturbances; and water diversion projects and associated roads will change hydrologic patterns to elicit cumulative effects. These alterations will initiate the following cumulative effects in the watershed: 1) changes in sediment transport; 2) alteration of discharge and retention rates of water; and 3) changes in velocity of water moving through the system.

Increases in OHV activities within the canyon could lead to resources damage (including to riparian zones) and water quality degradation. Specifically, petrochemicals could be introduced into the surface water by accidental spills from OHVs; driving through the flowing water and along the degraded trails will increase soil erosion in the canyon and sedimentation in the surface water; further, riparian vegetation will be degraded by crushing/compaction and other physical damage through increased use. All of these impacts cumulatively can alter infiltration and run-off characteristics within the canyon. OHV use in channels that are prone to flash floods

during precipitation events, even those occurring adjacent to the project area, also pose a threat to human life and safety.

Recreation

This project will have no cumulative impacts on non-motorized recreational use.

No Action Alternative

Soil/Floodplains/Water Quality/Riparian/ Wetlands

Under the no action alternative there will be no increase or change in the threat to the quality of soil, floodplains, water or riparian resources.

Recreation

Motorized and mechanized recreational use will continue through the canyon but travel will remain hazardous and use of the canyon will be restricted to some segments of the public due to the difficulty of driving on this portion of the road. Most affected under this alternative will be OHV users as they are the most common type of user in the area and most likely to utilize the road. Additionally, due to the number of road hazards and obstructions that currently exist, BLM staff and right-of-way holders in the area may be excluded from travelling in the canyon. This includes emergency personnel, surveyors and other field going personnel. Over time, conditions will worsen and may result in total impassibility through the canyon resulting in lost access to portions of a scenic loop and other points of interest in and near the canyon.

Human Health and Safety

Under the no action alternative the current hazardous conditions in the canyon will continue to exist. Road hazards such as boulders in the road and washed out segments of road will continue to be a safety concern. This segment of the road is managed as a trail, as defined by in BLM Manual 1626, Travel and Transportation Manual, and as such receives no regular maintenance and is managed for use by OHV or human powered stock.

Chapter 5. Mitigation Measures/Best Management Practices

The following resources have determined that the BMPs and mitigations measures listed below will minimize impacts to resources analyzed herein.

Soil/Floodplains/Water Quality/Riparian/Wetlands

1. BLM will utilize Best Management Practices (available at: http://ndep.nv.gov/bwqp/bmp05.htm) to reduce impacts to local soils and water quality as direct by *BLM Las Vegas Resource Management Plan, WT- 1a, 2a,* "Use Best Management Practices as identified by the State of Nevada"

2. A BLM appointed monitor will be on site for the duration of the project.

3. BLM will install fiberglass markers on both ends of the canyon's riparian area that clearly mark the road as best suited for ATV/UTV use.

4. BLM will install signs at the mouth of the canyon, on the side of the road, warning users of flash floods and other pertinent hazards present through the canyon.

5. BLM will install traffic counters or conduct vehicle counts to determine the amount of use through the canyon prior to road maintenance and continue collecting the data for at least one year.

Air Resources

A water truck will be made available to mitigate for fugitive dust generation. Where it is not possible to bring in a water truck all efforts will be made to minimize the generation of dust.

Threatened, Endangered or Candidate Animal Species

1. Should a desert tortoise enter the project area, all activities will immediately stop until such time as the animal has left the area of its own accord.

2. A speed limit of 25 miles per hour will be required for all vehicles associated with this project.

3. All workers will be instructed to check underneath all vehicles before moving them, as tortoise often take cover underneath parked vehicles.

Wild Horses and Burros

Workers will be informed to not harass (feed, pet, chase, etc.) wild burros if encountered on or near the project areas. And, if burros are encountered, workers will keep a safe distance from the animals.

Noxious/Invasive Non—Native Weeds

1. Avoid or minimize all types of travel through weed- infested areas. If a problem is identified and avoidance or removal is not possible, the project proponent shall set up inspection and equipment cleaning sites to prevent the spread of weeds upon departure.

2. Limit ground disturbance to the minimum necessary to safely construct and operate the Proposed Project. The Applicant would avoid creating soil conditions that promote weed germination and establishment

3. Project related equipment (i.e. undercarriages and wheel wells) will be cleaned of all mud, dirt and plant parts before each tour.

4. Project workers shall inspect, remove, and dispose of weed seed and plant parts found on their clothing and personal equipment, bag the product and dispose of in a dumpster for deposit in local landfills. Disposal methods may vary depending on the project. If you have questions consult with the LVFO Noxious Weed Coordinator.

Chapter 6. Tribes, Individuals, Organizations, or Agencies Consulted:

No outside consultation occurred.

Chapter 6 Tribes, Individuals, Organizations, or Agencies Consulted:

Chapter 7. List of Preparers

Table 7.1. List of Prepares

Name	Title	Responsible for the Following Section(s) of this Document
Jimmy Linares	Contractor	Project Manager
Lisa Christianson	Air Resource Specialist	Air Resources, Greenhouse Gas Emissions
Amelia Savage	Wildlife Biologist	ACEC, Fish and Wildlife Excluding Federally Listed Species, Migratory Birds, Threatened, Endangered or Candidate Animal Species
Sendi Kalcic	Wilderness Specialist	BLM Natural Areas, Wilderness and WSA, Areas with Wilderness Characteristics
Susanne Rowe	Archeologist	Cultural Resources, Native American Religious Concerns, Paleontology
John Evens	Planning and Environmental Coordinator	Environmental Justice, Socio-Economics
Krystal Johnson	Wild horse and Burro Specialist	Farmlands, Wild Horses and Burros
Boris Poff	Hydrologist	Floodplains, Hydrologic Conditions, Soils, Water Resources, Water Quality (drinking, surface and ground), Wetlands and Riparian Zones
Lucas Rhea	Fire Management Specialist	Fuels, Fire Management
Lorri Dee Dukes	Geologist	Geology. Mineral Resources, Energy Production
Billy G. Williams	Rangeland Technician	Invasive Species, Noxious Weeds
Kerri-Anne Thorpe	Reality Specialist	Lands, Access
Katie Kleinick	Natural Resource Specialist	Livestock Grazing, Rangeland Health Standards, Threatened, Endangered or Candidate Plant Species, Woodland and Forestry, Vegetation Excluding Federally Listed Species
Fred Edwards	Botanist	Livestock Grazing, Rangeland Health Standards, Threatened, Endangered or Candidate Plant Species, Woodland and Forestry, Vegetation Excluding Federally Listed Species
Chris Linehan	Outdoor Recreation Planner	Visual Resource Management, Recreation, Wild and Scenic Rivers
Dorothy Jean Dickey	Reality Specialist	Lands
Mike Moran	Hazardous Materials Specialist	Wastes (hazardous or solid)
Charlotte Carmichael	Safety and Occupational Health Specialist	Human Health and Safety